

# SEMTECH

**SUPERFAST RECOVERY  
DOUBLER AND CENTER  
TAPS**

**SCDAR05FF - SCDAR15FF  
SCNAR05FF - SCNAR15FF  
SCPAR05FF - SCPAR15FF**

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## SUPERFAST RECOVERY, HIGH CURRENT CENTER TAP AND DOUBLER RECTIFIER ASSEMBLIES

- Low forward voltage drop
- Low reverse leakage current
- Very fast reverse recovery time
- Low thermal impedance
- High forward and surge currents

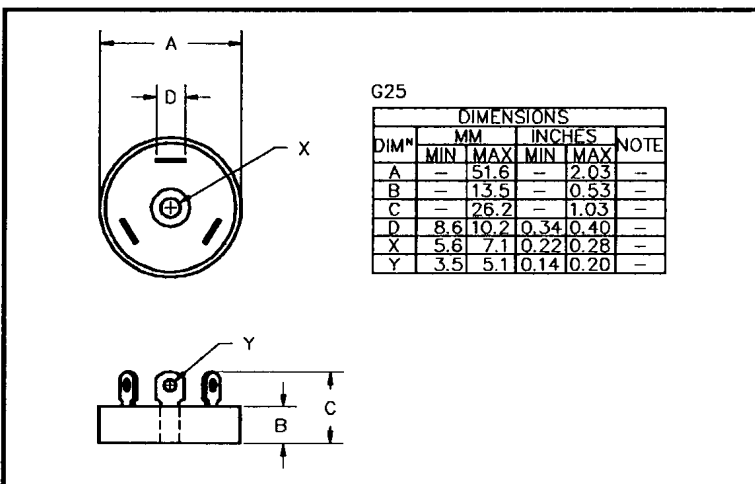
## QUICK REFERENCE DATA

- $V_R = 50V - 150V$
- $I_F = 45A$
- $t_{rr} = 30ns$
- $V_F = 0.97V$

## ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage $V_{RWM}$	Average Rectified Current (@ case temperature)			1 Cycle Surge Current $t_p = 8.3ms$		Repetitive Surge Current @ 25°C
		@ 25°C	@ 55°C	@ 100°C	@ 25°C	@ 100°C	
	Volts	Amps	Amps	Amps	Amps	Amps	Amps
SCDAR05FF SCDAR10FF SCDAR15FF	50 100 150	22.5	17.5	10	450	375	70
SCNAR05FF SCNAR10FF SCNAR15FF	50 100 150	45	35	20	450	375	70
SCPAR05FF SCPAR10FF SCPAR15FF	50 100 150	45	35	20	450	375	70

## MECHANICAL



Maximum thermal impedance  
 $R_{\theta JC} = 1.5^{\circ}C/W$

Approximate mass = 75g

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## ELECTRICAL CHARACTERISTICS (ratings apply per leg)

Device Type	Reverse Current @ $V_{RWM}$		Maximum Forward Voltage $V_F$ @ 15.0A @ 25°C	Maximum Reverse Recovery Time
	@ 25 °C	@ 100 °C		
	μA	mA	Volts	nS
SCDAR05FF SCDAR10FF SCDAR15FF	30	1.5	0.97	30
SCNAR05FF SCNAR10FF SCNAR15FF	30	1.5	0.97	
SCPAR05FF SCPAR10FF SCPAR15FF	30	1.5	0.97	

<sup>1</sup> Measured on discrete devices prior to assembly

Operating temperature range -55 °C to +150 °C  
Storage temperature range -55 °C to +150 °C

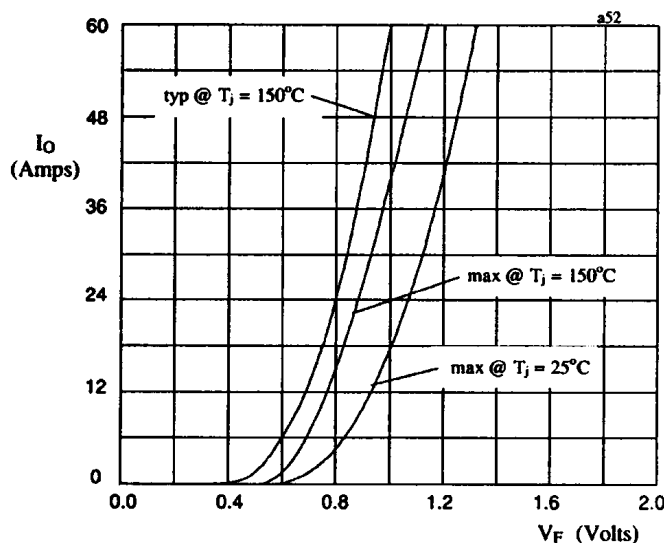


Fig 1. Forward voltage drop against current (per leg)

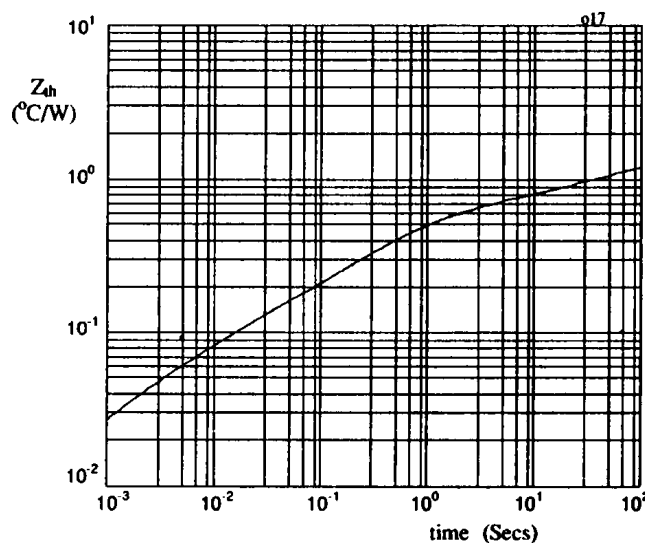


Fig 2. Transient thermal impedance characteristic per leg